

John Hancock USA

All financial obligations under the group annuity contract are the sole obligation of John Hancock Life Insurance Company (U.S.A.).

- ▶ John Hancock is a unit of Manulife Financial Corporation, a leading international financial services provider that helps people make their decisions easier and lives better by providing financial advice, insurance, and wealth and asset management solutions. Manulife Financial Corporation trades as MFC on the TSX, NYSE, and PSE, and under 945 on the SEHK. Manulife can be found at manulife.com.
- ▶ One of the largest life insurers in the United States, John Hancock supports more than ten million Americans with a broad range of financial products, including life insurance and annuities. John Hancock also supports US investors by bringing leading investment capabilities and retirement planning and administration expertise to individuals and institutions. Additional information about John Hancock may be found at johnhancock.com.

BlackRock Investment Management, LLC

- ▶ BlackRock® is a premier provider of global investment management, risk management and advisory services to institutional and retail clients around the world. Through BlackRock Solutions® - the natural evolution of our long-standing investment in developing sophisticated and highly integrated systems - we offer risk management, strategic advisory and enterprise investment system services to a broad base of clients. By combining sophisticated risk analytics and investment systems with capital markets and business process expertise, BlackRock Solutions helps clients address a variety of risk management and investment process challenges.

Allocating assets to only one or a small number of the investment options (other than the Target Date 'Lifecycle' or Target Risk 'Lifestyle' options) should not be considered a balanced investment program. In particular, allocating assets to a small number of options concentrated in particular business or market sectors will subject your account to increased risk and volatility. Examples of business or market sectors where this risk may be particularly high include: a) technology-related businesses, including Internet-related businesses, b) small-cap securities and c) foreign securities. John Hancock does not provide advice regarding appropriate investment allocations.

Risks Applicable to All Funds

Merger and Replacement Transition Risk for Sub-Account. It is possible that the Fund will be replaced with or merged into another investment option offered under your plan's group annuity contract. In the case of fund mergers and replacements, the affected funds that are being merged or replaced may implement the redemption of your interest by payment in cash or by distributing assets in kind. In either case, the redemption of your interest by the affected fund, as well as the investment of the redemption proceeds by the "new" fund, may result in transaction costs to the funds because the affected funds may find it necessary to sell securities and the "new" funds will find it necessary to invest the redemption proceeds. Also, the redemption and reinvestment processes, including any transition period that may be involved in completing such mergers and replacements, could be subject to market gains or losses, including those from currency exchange rates. The transaction costs and potential market gains or losses could have an impact on the value of your investment in the affected fund and in the "new" fund, and such market gains or losses could also have an impact on the value of any existing investment that you or other investors may have in the "new" fund. Although there can be no assurances that all risks can be eliminated, the portfolio manager(s) of the affected funds will use their best efforts to manage and minimize such risks and costs.

Risk of Increase in Expenses for Sub-Account. Your actual costs of investing in the fund may be higher than the expenses shown in "Annual fund operating expenses" for a variety of reasons. For example, expense ratios may be higher than those shown if a fee limitation is changed or terminated or if average net assets decrease. Net assets are more likely to decrease and fund expense ratios are more likely to increase when markets are volatile.

Risk Disclosures: Additional Risks

Conflict of Interest A conflict of interest may arise if the advisor makes an investment in certain underlying funds based on the fact that those funds are also managed by the advisor or an affiliate or because certain underlying funds may pay higher fees to the advisor than others. In addition, an advisor's participation in the primary or secondary market for loans may be deemed a conflict of interest and limit the ability of the investment to acquire those assets.

Country or Region Investments in securities from a particular country or region may be subject to the risk of adverse social, political, regulatory, or economic events occurring in that country or region. Country- or region-specific risks also include the risk that adverse securities markets or exchange rates may impact the value of securities from those areas.

Currency Investments in securities traded in foreign currencies or more directly in foreign currencies are subject to the risk that the foreign currency will decline in value relative to the U.S. dollar, which may reduce the value of the portfolio. Investments in currency hedging positions are subject to the risk that the value of the U.S. dollar will decline relative to the currency being hedged, which may result in a loss of money on the investment as well as the

position designed to act as a hedge. Cross-currency hedging strategies and active currency positions may increase currency risk because actual currency exposure may be substantially different from that suggested by the portfolio's holdings.

Custody Foreign custodial and other foreign financial services are generally more expensive than they are in the United States and may have limited regulatory oversight. The investment may have trouble clearing and settling trades in less-developed markets, and the laws of some countries may limit the investment's ability to recover its assets in the event the bank, depository, or agent holding those assets goes into bankruptcy.

Depository Receipts Investments in depository receipts generally reflect the risks of the securities they represent, although they may be subject to increased liquidity risk and higher expenses and may not pass through voting and other shareholder rights. Depository receipts cannot be directly exchanged for the securities they represent and may trade at either a discount or premium to those securities.

Derivatives Investments in derivatives may be subject to the risk that the advisor does not correctly predict the movement of the underlying security, interest rate, market index, or other financial asset, or that the value of the derivative does not correlate perfectly with either the overall market or the underlying asset from which the derivative's value is derived. Because derivatives usually involve a small investment relative to the magnitude of liquidity and other risks assumed, the resulting gain or loss from the transaction will be disproportionately magnified. These investments may result in a loss if the counterparty to the transaction does not perform as promised.

Emerging Markets Investments in emerging- and frontier-markets securities may be subject to greater market, credit, currency, liquidity, legal, political, and other risks compared with assets invested in developed foreign countries.

Equity Securities The value of equity securities, which include common, preferred, and convertible preferred stocks, will fluctuate based on changes in their issuers' financial conditions, as well as overall market and economic conditions, and can decline in the event of deteriorating issuer, market, or economic conditions.

ETF Investments in exchange-traded funds generally reflect the risks of owning the underlying securities they are designed to track, although they may be subject to greater liquidity risk and higher costs than owning the underlying securities directly because of their management fees. Shares of ETFs are subject to market trading risk, potentially trading at a premium or discount to net asset value.

Foreign Securities Investments in foreign securities may be subject to increased volatility as the value of these securities can change more rapidly and extremely than can the value of U.S. securities. Foreign securities are subject to increased issuer risk because foreign issuers may not experience the same degree of regulation as U.S. issuers do and are held to different reporting, accounting, and auditing standards. In addition, foreign securities are subject to increased costs because there are generally higher commission rates on transactions, transfer taxes, higher custodial costs, and the potential for foreign tax charges on dividend and interest payments. Many foreign markets are relatively small, and securities issued in less-developed countries face the risks of nationalization, expropriation or confiscatory taxation, and adverse changes in investment or exchange control regulations, including suspension of the ability to transfer currency from a country. Economic, political, social, or diplomatic developments can also negatively impact performance.

Income The investment's income payments may decline depending on fluctuations in interest rates and the dividend payments of its underlying securities. In this event, some investments may attempt to pay the same dividend amount by returning capital.

Index Correlation/Tracking Error A portfolio that tracks an index is subject to the risk that certain factors may cause the portfolio to track its target index less closely, including if the advisor selects securities that are not fully representative of the index. The portfolio will generally reflect the performance of its target index even if the index does not perform well, and it may underperform the index after factoring in fees, expenses, transaction costs, and the size and timing of shareholder purchases and redemptions.

Inflation-Protected Securities Unlike other fixed-income securities, the values of inflation-protected securities are not significantly impacted by inflation expectations because their interest rates are adjusted for inflation. Generally, the value of inflation-protected securities will fall when real interest rates rise and rise when real interest rates fall.

Issuer A stake in any individual security is subject to the risk that the issuer of that security performs poorly, resulting in a decline in the security's value. Issuer-related declines may be caused by poor management decisions, competitive pressures, technological breakthroughs, reliance on suppliers, labor problems or shortages, corporate restructurings, fraudulent disclosures, or other factors. Additionally, certain issuers may be more sensitive to adverse issuer, political, regulatory, market, or economic developments.

Large Cap Concentrating assets in large-capitalization stocks may subject the portfolio to the risk that those stocks underperform other capitalizations or the market as a whole. Large-cap companies may be unable to respond as quickly as small- and mid-cap companies can to new competitive pressures and may lack the growth potential of those securities. Historically, large-cap companies do not recover as quickly as smaller companies do from market declines.

Leverage Leverage transactions may increase volatility and result in a significant loss of value if a transaction fails. Because leverage usually involves investment exposure that exceeds the initial investment, the resulting gain or loss from a relatively small change in an underlying indicator will be disproportionately magnified.

Loss of Money Because the investment's market value may fluctuate up and down, an investor may lose money, including part of the principal, when he or she buys or sells the investment.

Management Performance is subject to the risk that the advisor's asset allocation and investment strategies do not perform as expected, which may cause the portfolio to underperform its benchmark, other investments with similar objectives, or the market in general. The investment is subject to the risk of loss of income and capital invested, and the advisor does not guarantee its value, performance, or any particular rate of return.

Market Trading Because shares of the investment are traded on the secondary market, investors are subject to the risks that shares may trade at a premium or discount to net asset value. There is no guarantee that an active trading market for these shares will be maintained.

Market/Market Volatility The market value of the portfolio's securities may fall rapidly or unpredictably because of changing economic, political, or market conditions, which may reduce the value of the portfolio.

Mid-Cap Concentrating assets in mid-capitalization stocks may subject the portfolio to the risk that those stocks underperform other capitalizations or the market as a whole. Mid-cap companies may be subject to increased liquidity risk compared with large-cap companies and may experience greater

price volatility than do those securities because of more-limited product lines or financial resources, among other factors.

Money Market Fund Ownership An investment in a money market fund is not a deposit in a bank and is not guaranteed by the FDIC, any other governmental agency, or the advisor itself. Money market funds report investment characteristics in SEC Form N-MFP. Institutional money market funds have a net asset value that may fluctuate on a day-to-day basis in ordinary conditions. All are subject to the risk that they may not be able to maintain a stable NAV of \$1.00 per share. Money market funds may opt to maintain liquidity through imposing fees on certain redemptions or a suspension of redemptions because of market conditions. Only exempt government money market funds are permitted to opt out of incorporating these liquidity maintenance measures to support the stable share price of \$1.00.

Mortgage-Backed and Asset-Backed Securities Investments in mortgage-backed and asset-backed securities may be subject to increased price volatility because of changes in interest rates, issuer information availability, credit quality of the underlying assets, market perception of the issuer, availability of credit enhancement, and prepayment of principal. The value of ABS and MBS may be adversely affected if the underlying borrower fails to pay the loan included in the security.

Not FDIC Insured The investment is not a deposit or obligation of, or guaranteed or endorsed by, any bank and is not insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other U.S. governmental agency.

Passive Management The investment is not actively managed, and the advisor does not attempt to manage volatility or take defensive positions in declining markets. This passive management strategy may subject the investment to greater losses during general market declines than actively managed investments.

Portfolio Diversification Investments that concentrate their assets in a relatively small number of issuers, or in the securities of issuers in a particular market, industry, sector, country, or asset class, may be subject to greater risk of loss than is a more widely diversified investment.

Preferred Stocks Investments in preferred stocks may be subject to the risks of deferred distribution payments, involuntary redemptions, subordination to debt instruments, a lack of liquidity compared with common stocks, limited voting rights, and sensitivity to interest-rate changes.

Pricing Some investments may not have a market observed price; therefore, values for these assets may be determined through a subjective valuation methodology. Fair values determined by a subjective methodology may differ from the actual value realized upon sale. Valuation methodologies may also be used to calculate a daily net asset value.

Real Estate/REIT Sector Concentrating assets in the real estate sector or REITs may disproportionately subject the portfolio to the risks of that industry, including loss of value because of changes in real estate values, interest rates, and taxes, as well as changes in zoning, building, environmental, and other laws, among other factors. Investments in REITs may be subject to increased price volatility and liquidity risk, and shareholders indirectly bear their proportionate share of expenses because of their management fees.

Repurchase Agreements Repurchase agreements may be subject to the risk that the seller of a security defaults and the collateral securing the repurchase agreement has declined and does not equal the value of the repurchase price. In this event, impairment of the collateral may result in additional costs.

Sampling Although the portfolio tracks an index, it maintains a smaller number of holdings than does the index. Use of this representative sampling approach may lead the portfolio to track the index less closely.

Shareholder Activity Frequent purchases or redemptions by one or multiple investors may harm other shareholders by interfering with the efficient management of the portfolio, increasing brokerage and administrative costs and potentially diluting the value of shares. Additionally, shareholder purchase and redemption activity may have an impact on the per-share net income and realized capital gains distribution amounts, if any, potentially increasing or reducing the tax burden on the shareholders who receive those distributions.

Small Cap Concentrating assets in small-capitalization stocks may subject the portfolio to the risk that those stocks underperform other capitalizations or the market as a whole. Smaller, less-seasoned companies may be subject to increased liquidity risk compared with mid- and large-cap companies and may experience greater price volatility than do those securities because of limited product lines, management experience, market share, or financial resources, among other factors.

Structured Products Investments in structured products may be more volatile, less liquid, and more difficult to price than other assets. These securities bear the risk of the underlying investment as well as counterparty risk. Securitized structured products including CMOs, CDOs, and other securitized products may increase volatility and be subject to increased liquidity and pricing risks compared with investing directly in the assets securitized within the product. Assets invested in structured products may be subject to full loss of value if the counterparty defaults on its obligation.

Target Date Portfolio Risk. A Target Date Portfolio is an investment option comprised of "fund of funds" which allocate their investments among multiple asset classes which can include U.S. and foreign equity and fixed income securities. The "target date" in a target date portfolio is the approximate date an investor plans to start withdrawing money. The Portfolio's ability to achieve its investment objective will depend largely on the ability of the sub-adviser to select the appropriate mix of underlying funds and on the underlying funds' ability to meet their investment objectives. The portfolio managers control security selection and asset allocation. There can be no assurance that either a Fund or the underlying funds will achieve their investment objectives. An investor should examine the asset allocation of the fund to ensure it is consistent with their own risk tolerance.

A Fund is subject to the same risks as the underlying funds in which it invests. Because target date funds are managed to specific retirement dates, investors may be taking on greater risk if the actual year of retirement differs dramatically from the original estimated date. Target date funds generally shift to a more conservative investment mix over time. While this may help to manage risk, it does not guarantee earnings growth nor is the fund's principal value guaranteed at any time including at the target date. An investment in a target-date fund is not guaranteed, and you may experience losses, including losses near, at, or after the target date. There is no guarantee that the fund will provide adequate income at and through retirement. Consider the investment objectives, risks, charges, and expenses of the fund carefully before investing.

For a more complete description of these and other risks, please review the fund's prospectus.

Target Date Target-date funds, also known as lifecycle funds, shift their asset allocation to become increasingly conservative as the target retirement year approaches. Still, investment in target-date funds may lose value near, at, or after the target retirement date, and there is no guarantee they will provide adequate income at retirement.

Tax-Exempt Securities Tax-exempt securities could be reclassified as taxable by the IRS or a state tax authority, or their income could be reclassified as taxable by a future legislative, administrative, or court action. This may result in increased tax liability as interest from a security becomes taxable, and such reclassifications could be applied retroactively.

U.S. Government Obligations Investments in U.S. government obligations are subject to varying levels of government support. In the event of default, some U.S. government securities, including U.S. Treasury obligations and Ginnie Mae securities, are issued and guaranteed as to principal and interest by the full faith and credit of the U.S. government. Other securities are obligations of U.S. government-sponsored entities but are neither issued nor guaranteed by the U.S. government.

Underlying Fund/Fund of Funds A portfolio's risks are closely associated with the risks of the securities and other investments held by the underlying or subsidiary funds, and the ability of the portfolio to meet its investment objective likewise depends on the ability of the underlying funds to meet their objectives. Investment in other funds may subject the portfolio to higher costs than owning the underlying securities directly because of their management fees.

Variable-Rate Securities Investments in variable-rate securities, which periodically adjust the interest-rate paid on the securities, may be subject to greater liquidity risk than are other fixed-income securities. Because variable-rate securities are subject to less interest-rate risk than other fixed-income securities, their opportunity to provide capital appreciation is comparatively reduced.

Sub-Account Details

Asset Class/Investment Style^{5A}

Target Date

Performance**

Returns (as of 3-31-25)

	Fund	Index	Peer Group
1 year	6.70%	7.82%	5.61%
3 year	5.84%	8.65%	5.64%
5 year	13.98%	18.47%	13.32%
10 year	8.40%	12.18%	7.83%

Expense Ratio (as of 3-31-25)****

Expense Ratio****	0.09%
Cost Per \$1,000	\$0.90

Sub-Account Inception Date: June 10, 2016
Underlying fund Inception Date: May 31, 2011

¥See important notes.

**The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the sub-account's underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying collective trust or other investment vehicle in which the sub-account invests. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website myplan.johnhancock.com.

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is Russell 1000.⁴⁵

The peer group is Target-Date 2045.⁴²

Principal risks include: equity securities; currency; money market fund ownership; index correlation/tracking error; emerging markets; shareholder activity; issuer; income; underlying fund/fund of funds; mortgage-backed and asset-backed securities; conflict of interest; derivatives; repurchase agreements; pricing; ETF; large cap; custody; management; Target Date portfolio; risk of increase expenses; merger and replacement transition; loss of money; depositary receipts; mid-cap; market trading; U.S. government obligations; not FDIC insured; sampling; tax-exempt securities; structured products; small cap; country or region; portfolio diversification; foreign securities; preferred stocks; real estate/REIT sector; leverage; target date; inflation-protected securities; passive management; variable-rate securities and market/market volatility. For more details, see Risk Disclosures section of this booklet.



Manulife
Retirement



BLACKROCK

BlackRock LifePath Index 2045 Fund ^{114,157}

Investing solely in BlackRock LifePath Index 2045 Fund (Class K)

Managed by BlackRock Investment Management, LLC

Ticker Symbol[†]: LIHXX

Fund Highlights

Investment Objective and Policies ▶ Seeks to provide for retirement outcomes based on quantitatively measured risk.

Why Consider this Fund

- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 02-28-25)^α

Blackrock Russell 1000 Index Fund F	50.5%
iShares Core MSCI Total Intl Stk ETF	28.7%
iShares US Long Credit Bond Index	4.3%
iShares FTSE NAREIT All Eq REIT Idx	4.3%
iShares US Securitized Bond Index	3.5%
Blackrock Small Cap Index Fund	3.1%
iShares US Long Government Bond Idx	1.9%
iShares US Intermediate Gov Bd Idx	1.6%
iShares US Intermediate Credit Bond Idx	1.6%
iShares Global Infrastructure ETF	0.3%

Totals 99.8% of assets

Asset Allocation (as of 02-28-25)^α

US Stock	55.6%
Non US Stock	28.9%
US Bond	11.8%
Cash	2.6%
Non US Bond	1.1%
Other	0.1%

Top Country Holdings (as of 02-28-25)^α

United States	69.2%
Japan	4.5%
United Kingdom	3.0%
Canada	2.5%
China	2.4%
Switzerland	2.0%
France	1.9%
Germany	1.7%
Taiwan	1.6%
India	1.5%

Top Sector Weightings (as of 02-28-25)^α

Technology	20.3%
Financial Services	13.3%
Consumer Cyclical	9.0%
Industrials	8.6%
Healthcare	7.8%
Communication Services	6.5%
Real Estate	6.4%
Consumer Defensive	4.6%
Energy	3.1%
Basic Materials	2.9%
Utilities	2.1%

Key Statistics (as of 3-31-25 unless noted)^α

- ▶ **Number of Holdings:** 12
- ▶ **Sharpe Ratio:** 0.15
- ▶ **Beta:** 0.88 (Russell 1000 TR USD)
- ▶ **R²:** 93.86 (Russell 1000 TR USD)
- ▶ **Turnover (annualized)[§]:** 18.00
- ▶ **Net Assets:** \$9.0 billion
- ▶ **Underlying fund expense ratios:**
 - Gross^{*} 0.14%
 - Net^{*} 0.09%
- ▶ **Market Cap (millions):** 113784.57

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying prospectus or offering documents for additional information.^A

¥ Important notes

Please call 800-395-1113 to obtain the Fund Sheet for the group annuity investment option sub-accounts and/or to obtain a prospectus (or Offering Memorandum/Trust Document) for the sub-accounts' underlying fund, that are available on request. The prospectuses (or Offering Memorandum/Trust Documents) for the sub-accounts' underlying funds contain complete details on investment objectives, risks, fees, charges and expenses as well as other information about the underlying funds which should be carefully considered before investing.

John Hancock conducts business in English.

Fees and expenses are only one of several factors that you should consider when making investment decisions. The cumulative effect of fees and expenses can substantially reduce the growth of your retirement account. You can visit the Employee Benefit Security Administration's Web site for an example demonstrating the long-term effect of fees and expenses.

Contributions under a group annuity contract issued by John Hancock Life Insurance Company (U.S.A.) (John Hancock USA) are allocated to investment options which: (a) invest solely in shares of an underlying mutual fund, collective trust, ETF, or other investment vehicle in which the sub-account invests; (b) invest in a combination of these; or (c) are Guaranteed Interest Accounts and which will be held in the John Hancock USA general account. For more information on a particular investment option, please refer to John Hancock USA's fund sheets, available through our web site myplan.johnhancock.com or your John Hancock USA representative.

Allocating assets to only one or a small number of the investment options (other than an asset allocation investment option such as a target date or target risk option) should not be considered a balanced investment program. In particular, allocating assets to a small number of investment options concentrated in particular business or market sectors could subject an account to increased risk and volatility.

* When contributions are allocated to funds under your employer's group annuity contract with John Hancock, they will be held in a sub-account (also referred to as "Fund"), which invests in shares of the specified underlying mutual fund, collective trust, ETF, or other investment vehicle in which the sub-account invests. The ticker symbols shown are for the underlying mutual fund, collective trusts, ETFs, or other investment vehicle in which the sub-account is invested. The ticker symbols do not directly apply to the John Hancock sub-account and therefore any public information accessed using these symbols will not reflect the unit value of the subaccount, nor will such information reflect sub-account, contract-level or participant-level charges under your plan's group annuity contract.

Information Concerning John Hancock's Short-Term Trading Policy

The group annuity contract is not designed for short-term trading. The effect of short-term trading may disrupt or be potentially disruptive to the management of the fund underlying an investment option and may thereby adversely impact the underlying fund's performance, either by impacting fund management practices or by increasing fund transaction costs. These impacts are absorbed by other fund investors, including retirement plan participants. For the protection of the participants, account changes are subject to the following short-term trading guidelines when exchanging investment options under your company's qualified retirement plan account with John Hancock. Requests may be cancelled if not within our guidelines.

Participants are allowed a **maximum of two exchanges per calendar month**. An **exchange** is defined as the full rebalance of a participant's account, or single or multiple fund-to-fund transfers that involve multiple investment options (also referred to as "inter-account transfers") on one day, and may be made online or with a client account representative.

Recognizing that there may be extreme market or other circumstances requiring a participant to make a further change, John Hancock will allow a participant to move **100% of their assets to a Money Market or Stable Value Fund (as available under the contract) after the exchange limit has been reached;**

no subsequent exchanges may be made for 30 days. Once the 30-day hold has expired, participants can trade again in accordance with the above guidelines.

The guidelines **do not** apply to regular allocations, loans, or withdrawals.

In addition, on an ongoing basis, participant account activity is reviewed for trading activity that, though within the monthly exchange limit, could be detrimental to an underlying fund and/or contrary to its exchange policies, as described in the fund's prospectus. As a result of this review, or if requested by a fund company, additional restrictions may be imposed on a participant's retirement account, including but not limited to:

- Applying redemption fees and/or trade restrictions as requested by the underlying fund manager. Such trade restrictions may be more restrictive than the above guidelines
- Restricting the number of exchanges made during a defined period
- Restricting the dollar amount of exchange
- Restricting the method used to submit exchanges (e.g., requiring exchange requests to be submitted in writing via U.S. mail)
- Restricting exchanges into and out of certain investment options

Participants can read about the short-term trading policy at myplan.johnhancock.com under the "modify your account - change account" feature. Redemption fees or market value adjustments associated with exchanges from particular investment options are described on applicable fund sheets, which are available online. For more information or to order prospectuses for the underlying investments, call 800-395-1113 and speak to a client account representative.

± Weightings - Applicable to only the Target Date (Lifecycle Portfolio) and Target Risk (Lifestyle Portfolios)

Each Target Risk/Target Date Portfolio has a target percentage allocation designed to meet the investment objectives of a corresponding investment orientation. Allocation percentages may vary or be adjusted due to market or economic conditions or other reasons as set out in the prospectus. Due to abnormal market conditions or redemption activity the fund may temporarily invest in cash and cash equivalents.

The underlying mutual fund, collective trust, ETF, or other investment vehicle in which the sub-account invests has the right to restrict trade activity without prior notice if a participant's trading is determined to be in excess of their exchange policy, as stated in an underlying fund's offering document.

⊖ The information shown is based on the most recent available information for the underlying mutual fund, collective trust, ETF, or other investment vehicle in which the sub-account invests (collectively referred to as underlying fund) as of the date of printing and is subject to change. Listed holdings do not represent all of the holdings in the underlying fund.

⊖ Average Credit Quality is from a Nationally Recognized Statistical Rating Organization (NRSRO).

1A. Your company's qualified retirement plan offers participants the opportunity to contribute to investment options available under a group annuity contract with John Hancock Life Insurance Company (U.S.A.) (John Hancock USA). These investment options may be sub-accounts (pooled funds) investing directly in underlying mutual fund, collective trusts, ETFs, or other investment vehicles, or they may be Guaranteed Interest Accounts.

The funds offered on the JH Signature platform are classified into five risk categories. The risk category in which a fund is placed is determined based on where the 10 year Standard Deviation (defined below) of the underlying fund's Morningstar Category falls on the following scale: if the 10 year Standard

Deviation of the underlying fund's Morningstar Category is 17.00 or higher, the Fund is classified as "Aggressive;" between 11.50 and 16.99 as "Growth;" between 7.00 and 11.49 as "Growth & Income;" between 2.50 and 6.99 as "Income;" and 2.49 and below as "Conservative." If a 10 year Standard Deviation is not available for a Morningstar Category, then the 5 year Standard Deviation of the underlying fund's Morningstar Category is used to determine the Fund's risk category. If a 5 year Standard Deviation is not available for a Morningstar Category, then the 3 year Standard Deviation of the underlying fund's Morningstar Category Index is used to determine the Fund's risk category. Standard Deviation is defined by Morningstar as a statistical measurement of dispersion about an average, which, for an underlying fund, depicts how widely the returns varied over a certain period of time.

The placement of each investment option's risk/return category is subject to change. This information is not intended as investment advice and there can be no assurance that any investment option will achieve its objectives or experience less volatility than another.

2A. Manager or Sub-Adviser refers to the manager of the underlying fund, or to the sub-adviser of the underlying John Hancock Trust, John Hancock Funds II, or John Hancock Funds III fund in which the sub-account invests. "Underlying fund" includes the underlying mutual fund, collective trust, ETF, or other investment vehicle in which a sub-account invests.

3A. Date sub-account or Guaranteed Interest Account first available under group annuity contract. The Signature Menu was introduced December 8, 2014. If the sub-account inception date is after December 8, 2014, then the Signature Menu introduction date is the same as the sub-account inception date.

4A. The performance data for a sub-account for any period prior to the sub-account Inception Date is hypothetical based on the performance of the underlying investment since inception of the underlying investment. All other performance data is actual (except as otherwise indicated). Returns for any period greater than one year are annualized. Performance data reflects changes in the prices of a sub-account's investments (including the shares of an underlying mutual fund, collective trust, or ETF), reinvestment of dividends and capital gains and deductions for the sub-account charges.

The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the sub-account's underlying fund and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or participant-level charges, fees for guaranteed benefits if elected by participant, or any redemption fees imposed by an underlying mutual fund, collective trust or ETF. These charges, if included, would otherwise reduce the total return for a participant's account. Performance current to the most recent month-end is available at myplan.johnhancock.com.

5A. Asset class/Investment style : Asset class refers to the broad category of investments the portfolio, or underlying fund, currently holds. Fixed income, or bond funds are often categorized by the duration and credit quality of the bonds held in the underlying fund. Equity, or stock underlying funds may be categorized by the size of the securities in which the fund invests (market capitalization). Investment style tells you whether the underlying fund invests in securities of companies that exhibit growth-style characteristics, such as above-average revenue and earnings growth, or in securities that exhibit value-style characteristics, such as shares considered to be underpriced in relation to fundamental measures such as revenues, earnings and assets.

****Expense Ratio (ER)

This material shows expenses for a specific unit class for investment options available under a John Hancock group annuity contract. The Expense Ratio ("ER") shown represents the total annual operating expenses for the investment options made available by John Hancock. It is made up of John Hancock's (i) "Revenue from Sub-account", and (ii) the expenses of the underlying fund (based on expense ratios reported in the most recent prospectuses available as of the date of

printing; "FER"). In the case where an underlying fund has either waived a portion of, or capped, its fees, the FER used to determine the ER of the sub-account that invests in the underlying fund is the net expense ratio of the underlying fund. "Underlying fund" or "fund" refers to the underlying mutual fund, collective trust, or exchanged traded fund ("ETF") in which the investment option invests. The FER is determined by the underlying fund and may be subject to fluctuation. Any change in the FER of an underlying fund will affect the Expense Ratio of the investment option which invests in the underlying fund. The ER applies daily at a rate equivalent to the annual rate shown, and may vary to reflect changes in the expenses of an underlying fund and other factors. For Expense Ratio information current as of the most recent quarter end, please refer to the monthly "Return and Fees" listing available from John Hancock upon request. For more information, please contact your financial representative.

** Performance of the Sub-account

The performance data for a sub-account for any period prior to the sub-account Inception Date is hypothetical based on the performance of the underlying portfolio.* The Signature Menu was introduced December 8, 2014. If the sub-account inception date is after December 8, 2014, then the Signature Menu introduction date is the same as the sub-account inception date. Returns for any period greater than one year are annualized. Performance data reflects changes in the prices of a sub-account's investments (including the shares of an underlying fund), reinvestment of dividends and capital gains and deductions for the Expense Ratio (ER). Performance does not reflect any applicable contract-level or certain participant-level charges, fees for guaranteed benefits if elected by participant under the group annuity contract or redemption fees imposed by the underlying portfolio. These charges, if included, would otherwise reduce the total return for a participant's account. All performance calculations shown have been prepared solely by John Hancock USA. The underlying fund company has not reviewed the sub-account's performance.

6A. Morningstar Category:

© 2025 Morningstar. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

Morningstar assigns categories by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor Morningstar uses as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

***Morningstar Portfolio Ratings

All Morningstar data is © 2025 by Morningstar, Inc. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. For each underlying fund with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in the underlying fund's monthly performance (does not include the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Exchange traded funds and open-ended mutual funds are considered a single population for comparative purposes. Funds with scores in the top 10% of each category receive 5 stars (highest); the next 22.5%, 4 stars (above average); the next 35%, 3 stars (average); the next 22.5%, 2 stars (below average); and the bottom 10%, 1 star (lowest). Morningstar ratings are applicable to the underlying only and reflect historical risk-adjusted performance as of the most recent calendar

quarter-end. Although gathered from reliable sources, the information is not represented or warranted by Morningstar to be accurate, correct, complete or timely.

^AThe amounts displayed represent the gross and net expense ratios of the underlying fund in which the sub-account invests. Where the figures are different, the underlying fund has either waived a portion of, or capped its fees, and the result of such fee waiver or cap is reflected in the net expense ratio. The waiver or cap is subject to expiration, in which case the Expense Ratio and performance of the sub account may be impacted. Refer to the prospectus of the underlying fund for details.

When calculating the Expense Ratio of the sub-account, the net expense ratio of the underlying fund is used. Returns shown reflect the Expense Ratio of the sub-account.

114. If John Hancock has been provided with your date of birth and no investment instructions at the time of enrollment, then, on the date of your enrollment, you will be default enrolled into a Target Date (Lifecycle Portfolio) based on your year of birth and a retirement age of 67, and subject to the Target Date then in existence.

157. This sub-account was recently introduced on June 11, 2016 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

Index Performance:

With respect to the Funds that display an index performance. Index performance shown is for a broad-based securities market index. Indexes are unmanaged and cannot be invested in directly. Index returns were prepared using Morningstar Direct. The performance of an Index does not include any portfolio or insurance-related charges. If these charges were reflected, performance would be lower. Past performance is not a guarantee of future results.

i45. Russell 1000 Index: Offers investors access to the extensive large-cap segment of the U.S. equity universe representing approximately 92% of the U.S. market, and is constructed to provide a comprehensive and unbiased barometer for the large-cap segment.

Peer Group Performance:

With respect to the Funds that display a Peer Group Performance. Source: Morningstar Direct for Mutual Funds, as of the most recent month end. Morningstar data is ©2025 by Morningstar, Inc. All rights reserved. Although gathered from reliable sources, the information is not represented or warranted by Morningstar to be accurate, correct, complete or timely. Peer groups are unmanaged and cannot be invested in directly.

p42. Target-Date 2045: Target-date portfolios provide diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2041-2045) for retirement. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Management adjusts the allocation among asset classes to more-conservative mixes as the target date approaches, following a preset glide path. A target-date portfolio is part of a series of funds offering multiple retirement dates to investors.

Key Statistics

⁸The Turnover Ratio shown is based on the most recent available financial statements for the underlying mutual fund, collective trust, ETF, or other investment vehicle in which the sub-account invests, as of the date of printing and is subject to change.

⁹Wrap Provider Exposure

S&P

Credit ratings of AA- or better are considered to be high credit quality; credit ratings of BBB- are good credit quality and the lowest category of investment grade; credit ratings BB+ and below are lower-rated securities ("junk bonds"); and credit ratings of CCC+ or below have high default risk. The credit quality breakdown does not give effect to the impact of any credit derivative investments

made by the fund.

Moody's

The rating scale, running from a high of Aaa to a low of C, comprises 21 notches. It is divided into two sections, investment grade and speculative grade. The lowest investment-grade rating is Baa3. The highest speculative-grade rating is Ba1. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa.

Financial Strength Rating[†]

A.M. Best Rating

AM Best's methodologies for rating is a comprehensive overview of the credit rating process, which consists of quantitative and qualitative evaluations of balance sheet strength, operating performance, business profile, and enterprise risk management.

Fitch Ratings

The terms "investment grade" and "speculative grade" have established themselves over time as shorthand to describe the categories 'AAA' to 'BBB' (investment grade) and 'BB' to 'D' (speculative grade). The terms investment grade and speculative grade are market conventions and do not imply any recommendation or endorsement of a specific security for investment purposes. Investment grade categories indicate relatively low to moderate credit risk, while ratings in the speculative categories either signal a higher level of credit risk or that a default has already occurred.

S&P

Credit ratings of AA- or better are considered to be high credit quality; credit ratings of BBB- are good credit quality and the lowest category of investment grade; credit ratings BB+ and below are lower-rated securities ("junk bonds"); and credit ratings of CCC+ or below have high default risk. The credit quality breakdown does not give effect to the impact of any credit derivative investments made by the fund.

Moody's

The rating scale, running from a high of Aaa to a low of C, comprises 21 notches. It is divided into two sections, investment grade and speculative grade. The lowest investment-grade rating is Baa3. The highest speculative-grade rating is Ba1. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa.

Fund availability subject to regulatory approval and may vary from state to state. The availability of products, funds and contract features may be subject to broker-dealer firm approval, state approval, broker licensing requirements, tax law requirements, or other contract-related requirements. From time to time, changes are made to funds, and the availability of these changes may be subject to state approvals or other compliance requirements. Please confirm with your local John Hancock Representative if you have any questions about product, fund or contract feature availability.

Manulife, Manulife Retirement, Stylized M Design, and Manulife Retirement & Stylized M Design are trademarks of The Manufacturers Life Insurance Company, and John Hancock and the Stylized John Hancock Design are trademarks of John Hancock Life Insurance Company (U.S.A.). Each are used by it and by its affiliates under license, including John Hancock Life Insurance Company of New York.

Group annuity contracts and recordkeeping agreements are issued by John Hancock Life Insurance Company (U.S.A.), Boston, MA (not licensed in New York). John Hancock Life Insurance Company (U.S.A.) makes available a platform of investment alternatives to sponsors or administrators of retirement plans without regard to the individualized needs of any plan. Unless otherwise specifically stated in writing, John Hancock Life Insurance Company (U.S.A.) does not, and is not undertaking to, provide impartial investment advice or give advice in a fiduciary capacity. Securities are offered through John Hancock Distributors LLC, member FINRA, SIPC.

¥ Important notes CONTINUED

NOT FDIC INSURED. MAY LOSE VALUE. NOT BANK GUARANTEED.

© 2025 Manulife John Hancock Retirement. All rights reserved.